UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,369	11/10/2003	Randy Neaman Siade	550,698	4337

7590 11/29/2004

CHARLES J. FASSBENDER
UNISYS CORPORATION
10850 VIA FRONTERA, M/S 1000
SAN DIEGO, CA 92127

EXAMINER	
HOLLINGTON, JERMELE M	

ART UNIT	PAPER NUMBER
2829	

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/705,369	SIADE ET AL.	
	Examiner	Art Unit	
	Jermele M. Hollington	2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 10-12* is/are rejected.

7)☒ Claim(s) *9* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 November 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered [see page 4, line 1 and page 43, line 17].

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: items 81-85 shown in Figs. 1, 9-11, and 14. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: there are numerous pages at the beginning sentences of the page and the end sentences of the page that are missing letters in some words.

Appropriate correction is required.

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

5. Claims 2 and 6 are objected to because of the following informalities: in line 1 of the claim the letter "e" is missing in "wher in". Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-8 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Friedrich et al (6307388).

Regarding claim 1, Friedrich et al disclose [see Figs. 1A-2] an electromechanical system (electromechanical apparatus 10) for testing IC-chips (IC chips 12c); said system being comprised of: a chips holding subassemblies (chip holding subassembly 12), which

has sockets (sockets 12b) for holding a group of IC-modules that include said IC-chips (12c); a moving means (actuator 16) for automatically moving said chip holding subassemblies (12) from a load position in said system (10) to a test position in said system (10) and visa-versa; a power supply means (power converter subassembly 13) which sends electrical power only to those IC -modules on said chip holding subassemblies (12) only when that subassembly (12) is at said test position; a temperature control means (temperature regulating subassembly 14), which contacts said IC-modules on said chip holding subassembly (12) only when that subassembly (12) is at said test position; a chip handler means (pressing mechanism subassembly 15), for automatically moving said IC-modules into and out of the sockets (12b), while said chip holding subassembly (12) is at said load position.

Regarding claim 2, Friedrich et al disclose said chip handler means (pressing mechanism subassembly 15) includes a robotic arm means (arms 15a and 15b) for moving said IC-modules from one source container into the sockets (12b) and from the sockets (12b) to at least one pass container and one fail container.

Regarding claim3, Friedrich et al disclose a means (arm components 17a and 17b) for automatically replacing any one of said containers when said robotic arm means (15a and 15b) filled that container with said IC-modules.

Regarding claim 4, Friedrich et al disclose each socket (12b) on said chip holding subassembly (12) faces downward at said load and test position, and receives an IC-module that has electrical terminals face downward.

Regarding claim 5, Friedrich et al disclose said robotic arm means (15a and 15b) flips each IC-module 180 degrees from an initial position where said electrical terminals face downward.

Regarding claim 6, Friedrich et al disclose each source container, each pass container, and each fail container is a JEDIC tray.

Regarding claim 7, Friedrich et al disclose said power supply means (13) is rigidly attached to said chip holding subassembly (12) and moves with that subassembly (12) from said load position to said test position.

Regarding claim 8, Friedrich et al disclose a signal generator means [not shown but see col. 1, lines 61-67] for sending test signals to all IC-modules which are held by said chip holding subassemblies (12) at said test position.

Regarding claim 10, Friedrich et al disclose said signal generator means [not shown but see col.1, lines 61-67] sends test signals, which place said IC-chips (12c) in a predetermined state but do not functionally test said IC-chips (12c).

Regarding claim 11, Friedrich et al disclose said signal generator means [not shown but see col.1, lines 61-67] sends test signals, which functionally test said IC-chips (12c).

Regarding claim12, Friedrich et al disclose said moving means (16) moves said chip holding subassembly (12) horizontally from said load position to said test position and said temperature control means (14) moves vertically to contact said IC-modules on said chip holding subassembly (12) at said test position.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tustaniwskyj et al (6,307,369 & 6,325,662 & 6,522,156 & 6,774,661 and 6,809,543), Rhodes et al (6,415,409), Ditri et al (6,581,486) and Babcock et al (6,658,736) disclose a method and apparatus for testing integrated chips.

9. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: regarding claim 9, the primary reason for the allowance of the claim is due to the fact that the prior art does not disclose signal generator means includes N digital state machine as claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermele M. Hollington whose telephone number is (571) 272-1960. The examiner can normally be reached on M-F (9:00-4:30 EST) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Tokar can be reached on (517) 272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jermele M. Hollington
Patent Examiner
Art Unit 2829

JMH
November 16, 2004